

Summary of the fifth Tokyo AMR One-Health Conference 2023

February 17, 2023

On February 17th, 2023, Tokyo AMR One-Health Conference was held online by the Ministry of Health, Labour and Welfare of Japan (MHLW) with the support of the Food and Agriculture Organization of the United Nations, the United Nations Environment Programme, the World Health Organization Regional Offices for South-East Asia and the Western Pacific and World Organisation for Animal Health. From 23 countries mostly from the Asia-Pacific Region, 120 participants, including director-level officials at ministries of health, agriculture and environment, researchers, medical professionals and AMR focal points from related institutions and organizations, shared expertise and experience and engaged in productive discussions. This Conference was held to follow up on the progress of the Asia-Pacific One Health Initiative on AMR (ASPIRE*) launched at the Tokyo Meeting of Health Ministers on AMR in April 2016.

*ASPIRE was launched to jointly identify and tackle challenges posed by AMR in the Asia-Pacific region by drawing a roadmap to actualize the regional frameworks of AMR in the four priority areas, 1) Surveillance system and laboratory network, 2) Health-care management, 3) Antimicrobial access and regulation, 4) Research and development.

【Objectives of the 2023 Conference】

- Jointly identify and tackle challenges posed by AMR in countries of the Asia-Pacific Region.
- Share the progress of implementation of National Action Plans on AMR based on the One-Health approach in the Asia-Pacific region.
- Share the progress of 4 ASPIRE working groups' activities in 2022, identify issues related to their activities and discuss activity plan for 2023.

【Conference Agenda】

- Opening Session: Speeches from MHLW, MAFF, WOA, FAO, CDC, WPRO and NIID
- Session 1: Overview of Progress of AMR in the World and Asia-Pacific Region (FAO, UNEP, WHO Regional Offices for South-East Asia and the Western Pacific, WOA)
- Session 2: Progress of National Action Plans on AMR based on the One-Health approach (Mongolia, Republic of Korea, Malaysia, The Democratic Republic of Timor-Leste), Himeji city initiatives on AMR
- Session 3: Progress report of 4 working groups on ASPIRE
 - WG1: Surveillance system and laboratory network (Chair: Japan)
 - WG2: Health-care management (Chair: Japan)
 - WG3: Antimicrobial access and regulation (Chair: WPRO and Japan)
 - WG4: Research and development (Chair: Thailand and Singapore)
- Session 4: Working Group discussion and short presentation on WG discussion

【 Conference outcomes 】

1. Progress of AMR in the World and Asia-Pacific Region

- The Strategic Framework for collaboration on AMR was launched by Quadripartite Directors-General in April 2022 for One Health support to the Global Action Plan on AMR as well as strengthening global AMR governance. **FAORAP** ongoing projects include the implementation of CODEX standards, technical assistance for animal health systems in Asia, engaging the food and agriculture sectors in the global efforts to combat AMR and working jointly with Quadripartite partners to enhance One Health response to AMR.
- **In SEAR**, 11/11 countries have developed their AMR NAPs and all countries are implementing their NAP. 10/11 countries have standardized AMR surveillance systems for human health. SEAR's 3 ways forward: SUSTAIN (Strengthen regulatory action on substandard and falsified antimicrobials), ACCELERATE (Capacity building of human resources and financial investment to address AMR), INNOVATE (Research into novel vaccines against AMR pathogens).
- **In WPR**, 21/27 countries have been implementing their AMR NAPs and 6/27 countries are implementing their 2nd AMR NAPs. WPRO published regional AMR outbreak response guidance document for capacity building for AMR outbreak response at hospital settings, about to publish AMR disease burden in the Region, finalized regional antimicrobial stewardship workbook and training package, launched the Western Pacific Regional Antimicrobial Consumption Surveillance System (WPRACSS).
- **WOAH** regularly updates its Codes & Manuals to improve animal health and welfare and veterinary service, supports its Members' implementations of the international standards, and improve technical capacities of the Members through WOAHC Collaborating Centers and laboratory networks all over the world. Global database and annual reports on Antimicrobial Agents Intended for Use in Animals (AMU) are one of the flagship programs of WOAHC aligning with global action plans for AMR.
- **UNEP**: Strengthening of environmental action in the One Health response to AMR will not only help reduce the risk and burden of AMR on societies but will also help address the triple planetary crisis of biodiversity loss, climate change and pollution. Water-based Epidemiology, Air Quality Monitoring and Circular Economy are expected to be utilized as a tool.
- Since **Himeji city** has declared itself a "City Promoting Countermeasures against AMR" in 2022, the city has been engaged in public awareness-raising activities for AMR, such as hand washing and antimicrobial stewardship, based on the recognition that it is highly significant for municipalities to engage in AMR countermeasures because municipalities have many opportunities to directly educate citizens through public information media and

events and AMR countermeasures lead to activities to extend healthy life expectancy of citizens.

2. The progress on ASPIRE working groups activities

① **Working group 1 :Surveillance system and laboratory network**

- WG1's Objectives are
 - ♦ To promote information sharing on AMR surveillance activities
 - ♦ To enhance collaboration on AMR surveillance activities
 - ♦ To increase regional capacity and capability for AMR surveillance activities
- ASPIRE working group members site officially opened only for WG member countries in April 2022.
- Many WG1 participating countries can now submit their national data to GLASS. As a next step, they have been invited to join the ASIARS-Net trial to create feedback reports at the hospital level by exporting their data from WHONET or converting their Excel data using a tool provided in ASIARS-Net . Other WG1 participating countries have also been invited to join the ASIARS-Net trial.
- As for the Tricycle surveillance project, 3 countries: Viet Nam, Malaysia and Indonesia, started to collect samples for the project and more countries are expected to join the project in 2023. The need for indicators and collection sites to be in line with the actual situation in each country was discussed.

② **Working group 2 : Health-care management**

- Scope and goal for 2021-2023
 - ♦ Risk assessment methodologies on how to assess the risk of AMR in human health, animal health and the environment.
 - ♦ To develop a network of AMR outbreak response and develop a guidance on risk assessment and response to an event/outbreak of AMR pathogen in human health, and if possible, in animal health and the environment.
- Challenges for the establishment of risk assessment and public health response to an AMR outbreak are limited resources such as funding, microbiologists, epidemiologists, isolation rooms, differences in response to an outbreak between hospitals and health authorities as well as the diversity of systems and response capacities in different areas of country.
- One of the challenges in applying risk assessment scheme to animal, food or environmental sectors is how to detect a specific pathogen in these sectors.
- In 2023, the outcome of the workshop in 2022 which was held with stakeholders from seven countries will be published as a guidance document. The workshop for trainer training for

the risk assessment and response based on the guidance was held in February 2023, attended by more than 40 experts.

- The potential application of risk assessment methodology for outbreak response to animal and environmental sectors will be discussed further.

③ **Working group 3 : Antimicrobial access and regulation**

- Plans
 - ♦ Introduction of the “Manual of antimicrobial stewardship”
 - ♦ Establishment of the partnership to proceed Antimicrobial Stewardship Program (ASP) in hospitals.
- For countries interested in the “Manual of antimicrobial stewardship”, customized Manuals were being prepared to meet their needs.
- The support of ASP which is tailored to the local health care system in the Asia-Pacific region was planned.
- In November 2022, NCGM signed a partnership with Bhutan to collaborate on AMR.
- Regarding non-prescription antibiotic use, it is necessary to consider potential confounding economic factors such as health insurance or incentives in each country.
- WG3 will continue to investigate the situation of purchase of antimicrobials without a prescription on animal/health side, check back in the next year on the status of guideline for the use of antimicrobials in the area of livestock and update One Health initiatives in other countries.

④ **Working group 4 : Research and development**

- WG4 is working closely with WG1 to deepen knowledge on the molecular or genomic epidemiology of AMR. The knowledge will be used to guide policy for AMR control.
- “Genomic analysis on drug resistant bacteria in Asia” project is in progress.
- Points of the group discussion:
 - ♦ One Health AMR research is very broad and there are many challenges to be addressed, including the difference of the research priority setting in each country, the need for cross-disciplinary/specialty collaboration and capacity building in research.
 - ♦ Possibility of a future regional One Health AMR research meeting for sharing research protocols, result and to enable further networking.
 - ♦ Funding for regional/Asian research relatively limited.

Recognizing the importance of international cooperation and Japan's role in the international community, the Ministry of Health, Labour and Welfare will continue to hold this Conference annually.